

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

This draft ecological site description is approved for field use and testing for a one year period beginning MM, YYYY.
Additional information and comments on this site should be sent to the Utah State Range Management Specialist.

STATE: Utah

SITE TYPE: Rangeland

ECOLOGICAL SITE NAME: Mountain Very Steep Stony Loam (Bitterbrush)

SITE NUMBER: 047CY472UT

MLRA: 047C

Original Site Description: Author: LLR, DJS

Date: 04/01/1992

Revised Site Description: Author:

Date:

Approved by: Title: State Range Cons. Signed: Pat Shaver

Date:

Ecological Site Definition - A distinctive kind of land, with specific physical characteristics, which differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation, and in its response to management.

A. PHYSICAL CHARACTERISTICS

(description narrative of this particular site)

1. SOILS

Depth: 20-60 inches

Surface Textures:

Surface Fragments(<=3" % cover, >3" % cover):

Subsurface Textures:

Subsurface Fragments(<=3" % vol, >3" % vol):

Geologic Parent Materials: Alluvium and Colluvium from Igneous Materials

Moisture Regime: Ustic

Temperature Regime: Frigid

Runoff: Moderate-Rapid

Permeability(min-max): Moderate

Drainage Class(min-max): Well Drained

Water Erosion Hazard:

Wind Erosion Hazard:

Electrical Conductivity (EC in mmhos/cm):

Sodium Adsorption Ration (SAR):

Soil Reaction (1:1 water):

Soil Reaction (0.1 M CaCl₂):

pH Range:

Available Water Capacity (inches):

Major Soils Associated With This Site:

Soil Survey Area: 047

Ironco GRV-L

Guben Variant GR-L

Additional information may be found in Section II of the Field Office Technical Guide.

2. PHYSIOGRAPHIC FEATURES

Site Type: Rangeland

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1. Potential Plant Community Description and Ecological Factors

The general view of this site is a stand of bitterbrush and mountain big sagebrush. The composition by air-dry weight is approximately 45 percent perennial grasses, 5 percent forbs, and 50 percent shrubs.

2. Plant Community Composition by Weight and Percentage

Grasses and Grasslike, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Needleandthread	HECO26		150	200	15	20
Bluebunch wheatgrass	PSSP6		50	100	5	10
Nevada bluegrass	PONE3		50	100	5	10
Indian ricegrass	ACHY	1	10	30	1	3
Letterman needlegrass	ACLE9	1	10	30	1	3
Prairie junegrass	KOMA	1	10	30	1	3
Sheep fescue	FEOV	1	10	30	1	3
Western wheatgrass	PASM	1	10	30	1	3
Geyer sedge	CAGE2	1	10	30	1	3
Bottlebrush squirreltail	ELEL5	1	10	30	1	3
Sandberg bluegrass	POSE	1	10	30	1	3
Other perennial grasses	PPGG	1	50	100	5	10
Other annual grasses	AAGG	1	50	100	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Longleaf hawksbeard	CRAC2	2	10	30	1	3
American purple vetch	VIAM	2	10	30	1	3
Blue flax	LIPE2	2	10	30	1	3
Spurred lupine	LUCAC3	2	10	30	1	3
Western mountain aster	ASOC	2	10	30	1	3
Wyoming Indian paintbrush	CALI4	2	10	30	1	3
Silverleaf milkvetch	ASAR4	2	10	30	1	3
Other perennial forbs	PPFF	2	30	100	3	10
Other annual forbs	AAFF	2	30	100	3	10

Shrubs, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Bitterbrush	PUTR2		200	250	20	25
Mountain big sagebrush	ARTRV		100	150	10	15
Utah serviceberry	AMUT		50	100	5	10
Birchleaf mountainmahogany	CEMO2	3	10	30	1	3
Mountain snowberry	SYOR2	3	10	30	1	3
Crispleaf wild buckwheat	ERCO14	3	10	30	1	3
Slender wild buckwheat	ERMI4	3	10	30	1	3
Mountain low rabbitbrush	CHVIL4	3	10	30	1	3
Mountain rubber rabbitbrush	CHNAS	3	10	30	1	3
Sulphurflower wild buckwheat	ERUM	3	10	30	1	3
Creeping Oregon Grape	MARE11	3	10	30	1	3
Watson heathgoldenrod	ERWA8	3	10	30	1	3
Other shrubs	SSSS	3	50	100	5	10

3. Plant Community Annual Production

At the highest potential similarity index, this site will produce approximately the following amount of air-dry herbage, expressed as pounds/acre:

	Low	High
Favorable Year	1200	1300
Average Year	900	1000
Unfavorable Year	600	700

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	30	2	15
Forbs (perennial)	5	1	5
Shrubs	50	4	20
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

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Because slopes are so steep, grazing by livestock does not appear to be a significant factor in altering the plant community. Fire will cause the shrubs to temporarily decrease while grasses will increase.

Plant Communities & Transitional Pathways

(Show a steady state diagram with influences to move from one steady state to another)

6. Plant Growth Curves

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	5	20	50	5	10	5	5	0	0
Name	PNC											
ID Number	UT4721											
Description	Excellent Condition											

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	0	30	50	0	10	10	0	0	0
Name	Good Condition No.1											
ID Number	UT4722											
Description	needlegrass, bluegrass, bitterbrush											

7. Aspect Differences Near MLRA Boundaries

(Give related range sites in MLRA's above and below)

8. Associated Sites Within MLRA

047CY446UT

Mountain Shallow Loam (Mountain big sagebrush)

047CY475UT

Mountain Windswept Ridge (Black sagebrush)

Rock Outcrop

9. Correlated Sites in Other States

(Give site name and number)

D. MAJOR USES OF THIS SITE

1. Livestock

a. Site Factors Influencing Management

Because slopes are so steep, livestock grazing is not significant.

b. Guide to Forage Quality (Plant preference by season)

Species	Oct-Nov	Dec-Feb	Mar-May	Jun-Sep

VG = Very Good G = Good F = Fair P = Poor

2. Wildlife

a. Site Factors Influencing Management

This site has good values for wildlife food and cover.

b. List of Potential Species Present

Wildlife using this site include sage grouse, rabbit, coyote, mule deer and elk.

This is a short list of the more common species found. Many other species are present as well and migratory birds are present at times.

c. Guide to Forage Preference of Managed Wildlife Species

Wildlife Species →				
Plant Species ↓	Use	Season	Use	Season

Use - A = preferred or desirable
 B = some use, but less important
 C = little use or used occasionally

Season - F = Fall (Oct-Nov)
 W = Winter (Dec-Feb)
 Sp. = Spring (Mar-May)
 Su. = Summer (Jun-Sep)

3. Recreational Uses

This site offers color and aesthetic appeal during the growing season and the fall. Because slopes are steep this site receives limited recreation use.

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4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Ironco GRV-L, High Rainfall, Eroded — loamy-skeletal, mixed Typic Argiborolls

Type Location: See Uintah County Soil Survey

General Legal Description:

Field Office Site Location

Roosevelt

Data Collected and References

Sampling Source	Number of Records	Range Similarity Index			
		> 76%	51-75%	26-50%	0-25%
NRCS - ECS - 417					
UTAH - RANGE - 2					
Permanent Transect Location					

Other References